MTRS

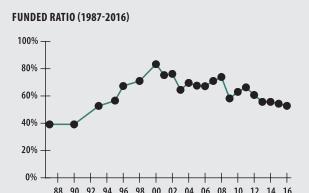
(Mass. Teachers' Retirement System) 500 Rutherford Avenue, Suite 210 Charlestown, MA 02129-1628 Phone 617-679-MTRS (6877) Fax 617-679-1661

Board Members

Jeff Wulfson (Chairperson), Auditor Suzanne M. Bump, Nicola Favorito, Jacqueline A. Gorrie, Treasurer Deborah B. Goldberg, Richard L. Liston, Dennis J. Naughton,

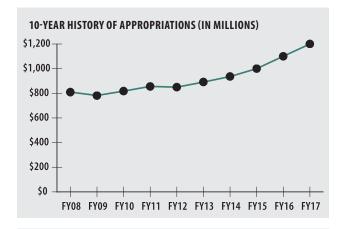
Joannah M. Quinn, Anne Wass **Board Administrator** Erika Glaster **Board Meeting**

Last Friday of the month





INVESTMENT RETURN (2012-2016, 5 YEAR AND 32 YEAR AVERAGES) 16% 14% 12% 10% 8% 6% 4% 2% 12-16 85-16 15 16



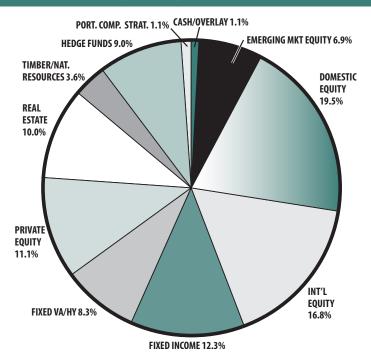
31 years 2015 32 years 2016 30 years 2014 9.37% 9.41% 9.70% 10 years 2016 10 years 2015 10 years 2014 5.15% 5.96% 7.12% 5 years 2016 5 years 2015 5 years 2014 9.28% 10.16% 7.62%

INVESTMENT RETURN HISTORY

ACTUARIAL

▶ Funded Ratio		E2 00/
		52.8%
Date of Last Valuation		01/16
► Actuary		PERAC
Assumed Rate of Return		7.50%
► Funding Schedule		8.94% Total Increasing
Year Fully Funded		2036
Unfunded Liability		\$22.0 B
► Total Pension Appropriation (Fiscal 2017)		\$1.2 B
	ACTIVE	RETIRED
Number of Members	91,059	63,744
► Total Payroll/Benefit	\$6.4 B	\$2.7 B
Average Salary/Benefit	\$70,200	\$42,900
► Average Age	44	72
Average Service	12.9 years	NA

ASSET ALLOCATION (12/31/15)



EARNED INCOME OF DISABILITY RETIREES (2015)

► Number of Disability Retirees	562
▶ Number Who Reported Earnings	118
► Number of Excess Earners	2
► Total Amount of Refund Due	\$13,452.65

▶ 2016 Return	8.16%
▶ 2016 Market Value	\$25.2B
▶ 2012-2016 (Annualized)	9.28%
▶ 1985-2016 (Annualized)	9.37%